

National Liver Offering Scheme Monitoring Group 3rd November 2021

The group met to discuss the 42-month report of outcomes in the National Liver Offering Scheme (NLOS). The report was reviewed in detail and a number of specific observations are highlighted.

General comments

1. The group recognised the enormous contribution from Mark Hudson in guiding the monitoring group through the first three years of the NLOS.
2. It is increasingly difficult to determine what changes to outcomes identified in the exhaustive report are due to implementation of the NLOS and what changes are as a result of the COVID-19 pandemic. A review of the monitoring reports is planned to ensure that the data captured is appropriate and the presentation allows interpretation. This is important now to prepare for changes to NLOS that are planned through work done to update parameter estimates and the introduction of new indications.
3. In general, trends are similar to those previously identified, in particular outcomes for patients with HCC both as relate to waiting list outcomes and the increase in allocation of DCD grafts to patients in this group.

Registration activity

4. Elective registrations have been impacted by COVID-19, particularly during the peak activity periods (Figure 1).
5. In the very early post-registration outcomes there remains an increase in early transplantation (Table 6, Figure 3), predominantly in the CLD patient group. It was also noted that there has been an increase in early removal from the waiting list due to other reasons. This appears to have increased both following the introduction of NLOS and during the pandemic (Figure 6). In more than half of cases this was due to condition improved. It is not clear whether this is a change in registration behaviour following the introduction of NLOS.

6. The decrease in waiting list mortality (including removals for condition deteriorated) at 6-months post-registration observed soon after the introduction of NLOS is sustained (Table 6).

Liver offering

7. We have previously noted a decrease in the proportion of DCD livers offered but not retrieved (Table 9). This is now paralleled with a decrease in the proportion of livers retrieved and subsequently transplanted. This is at a time when the use of machine perfusion and other preservation strategies are increasing to aid utilisation. It is not clear to what extent the pandemic has impacted this observation (though it was present in prior reports) and further analyses are planned.
8. The time series presented in Figure 11 suggests that the proportion of livers retrieved but not transplant increased after the introduction of NLOS and again during the pandemic period. The commonest reason used to describe livers retrieved but not transplanted is "Other" (Table 10). The accompanying paper received by the monitoring group describing liver utilisation highlights the work being done aiming to maximise transplantation but it remains important that the granularity of data capture is improved around this important group of livers.
9. Offering to variant syndrome patients varies significantly between centres (Table 14A). It is not clear why there are relatively more variant syndrome offers being made to one centre and, with the introduction of new indications that will be offered through the variant syndrome group, it is important to understand this so that the impact of changes can be understood.

Transplant activity

10. The number of transplants from both DBD and DCD is now substantially lower in the period post-NLOS introduction (Table 20). This has changed over the past 12 months (through comparison of reports), highlighting the need to consider changes over time before inferences are drawn. It was noted again in this report however that there were changes in the numbers of DCD transplants being done in individual centres comparing the period before and after the introduction of NLOS. It is not

clear whether this again represents an impact of the pandemic or whether, for the highest volume centres, an increase in DBD offering has displaced some DCD activity that has not been taken up in other centres.

11. 90-day and 1-year survival after transplantation continues to improve with no apparent impact from the introduction of NLOS (Figures 18 & 24). Unadjusted one year survival after DBD transplant is estimated at 95.1%.

Ian Rowe

Chair of the NLOS Monitoring Group

3rd November 2021